Appl. No. 10/729,128
Amdt. dated June 14, 2005
Reply to Office action of March 14, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-4 (cancelled)
- 5. (currently amended) An apparatus for receiving, storing, transmitting, and releasing manufactured products, said apparatus suitable for insertion into the manufacturing flow at various stages of product fabrication, comprising:
- a <u>computer-controlled</u> chamber for maintaining <u>an internal temperature</u> specified environments; said chamber having a <u>computer-controlled</u> an entry and exit;
- a transport system connecting said entry and exit, said system including movable platforms suitable for transporting [[said]] a product into and out of the chamber; said system designed to create waiting lines for said product loaded on said platforms; and computer controlled monitors for position and time of said platforms, said monitors operable to achieve a balanced product throughput through said chamber.

a computer-controlled reflow station connecting to the chamber, having a reflow-temperature profile with a end-point temperature higher than room-temperature; and

the internal temperature of the computer-controlled chamber comparable to the end-point temperature.

- 6. (currently amended) The apparatus according to Claim 5 wherein said <u>computer-controlled</u> chamber <u>maintains</u> environments include computer-controlled gaseous ambient [[,]] <u>and</u> humidity, and temperature.
- 7. (currently amended) The apparatus according to Claim 5 wherein said product comprises <u>flip-chip</u> semiconductor devices <u>on substrates</u>.
- 8. (currently amended) The apparatus according to Claim 5 wherein said waiting lines are structured as the chamber comprises horizontally rotatable carousels adapted to carry flipchip semiconductor devices on substrates.
- 9. (currently amended) The apparatus according to Claim 5 wherein said waiting lines

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are structured as the chamber comprises vertically rotatable wheels adapted to carry flip-chip semiconductor devices on substrates.

- 10. (currently amended) The apparatus according to Claim 5 wherein said waiting lines are structured as the chamber comprises elongated conveyor systems adapted to carry flipchip semiconductor devices on substrates.
- 11. (currently amended) The apparatus according to Claim 5 wherein said inlets and outlets are supported by further comprising sensors feeding their observations back to said computer control.

12-15 (cancelled)